

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,897	09/28/2001	Naveen K. Kakani	NC17228 (NOKI13-17228)	4366
75	90 11/03/2004		EXAM	INER
Robert M Bauer Esq			TRAN, THIEN D	
BROWN RAYS	SMAN MILLSTEIN FEL	DER & STEINER LLP		
900 Third Avenue New York, NY 10022			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/966,897	KAKANI ET AL.
Office Action Summary	Examiner	Art Unit
	Thien D Tran	2665
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a relef to period for reply is specified above, the maximum statutory perions failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the main earned patent term adjustment. See 37 CFR 1.704(b).	1.  1.136(a). In no event, however, may a reply be tile the statutory minimum of thirty (30) day of will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE.	nely filed  ys will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. § 133).
Status	·	
1) Responsive to communication(s) filed on 28 2a) This action is <b>FINAL</b> . 2b) The 3) Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final.  vance except for formal matters, pro	
Disposition of Claims		
4) ☐ Claim(s) 1-24 is/are pending in the application 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-24 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.	
Application Papers		
9) The specification is objected to by the Examin 10) The drawing(s) filed on is/are: a) acceptant may not request that any objection to the Replacement drawing sheet(s) including the correct at 11) The oath or declaration is objected to by the I	eccepted or b) objected to by the seed drawing(s) be held in abeyance. Seection is required if the drawing(s) is objection	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document of:  2. Certified copies of the priority document of:  3. Copies of the certified copies of the priority document of the priority document of the certified copies of the certified copies of the priority document of the certified copies of the cert	nts have been received. nts have been received in Applicationity documents have been received au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1)   Notice of References Cited (PTO-892)	4) 🗖 Intendent Street	(PTO 442)
<ul> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date 08/11/03, 09/30/03.</li> </ul>	4) Interview Summary Paper No(s)/Mail D:  5) Notice of Informal F  6) Other:	

#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 2, 5-24 are rejected under 35 U.S.C. 102(e) as being participated by Yang et al (U.S Publication No. 2002/0041566 A1).

Regarding claims 1, 13 Yang discloses an a mobile communication system for communicating packet data in at least a first packet data flow pursuant to at least a first communication session with at least a first mobile station by way of at least a first air link, the mobile communication system having a GTP (network portion), hereinafter network portion, figure 1, to which at least a first data service is coupled, and the network portion including a network element and an BSSGP (interface element),

Application/Control Number: 09/966,897

Art Unit: 2665

hereinafter, interface element, figure 1, connected thereto by way of a communication link, the packet data communicated between the network element and the first mobile station upon a communication path of which the communication link and the first air link form portions, an improvement of apparatus for selectably facilitating control of at least the first packet data flow upon the communication path in an interference region, paragraph 0022, said apparatus comprising:

a service rate decision (data packet flow selector), hereinafter data packet flow selector, coupled to the network portion for receiving an indication of communication of the packet data in the first packet data flow upon the first air link, said selector operable responsive thereto for selecting whether to alter the first packet data flow upon the communication path, paragraph 0045.

Regarding claim 21 Yang discloses a method for communicating in a mobile communication system for communicating packet data in at least a first packet data flow pursuant to at least a first communication session with at least a first mobile station by way of at least a first air link, the mobile communication system having a network portion to which at least a first data service is coupled, and the network portion including a network element and an interface element connected thereto by way of a communication link, paragraph 0013, the packet data communicated between the network element and the first mobile station upon a communication path of which the communication link and the first air link form portions, an improvement of a method for selectably facilitating control of at least the first packet data flow upon the communication link, figure 1, said method comprising: monitoring an indication of

Application/Control Number: 09/966,897

Art Unit: 2665

communication of the packet data in the first packet data flow upon the first air link, paragraph 0039; and selecting, responsive to the indication monitored during said operation of monitoring, whether to alter the first packet data flow upon the communication path, figure 3.

Regarding claim 2, Yang discloses that data packet flow detector selects whether to alter the first packet data flow upon the communication link of the communication path, paragraph 0045.

Regarding claims 5, 22 Yang discloses that the mobile communication system communicates packet data in the first packet data flow pursuant to the first communication session with the first mobile station and communicates packet data in at least a second packet data flow pursuant to at least a second communication session with at least a second mobile station by way of at least a second airlink and wherein said apparatus further comprises: a resource manager (flow allocator), hereinafter flow allocator, coupled to said data packet flow selector, said flow allocator for selectably allocating communication capacity upon the communication link between the first packet data flow and the at least the second packet data flow responsive to selection made by said data packet flow selector, paragraph 0042.

Regarding claim 6, Yang discloses that data packet flow selector further receives an interference level (indication), paragraph 0039, of communication of the packet data in the second packet data flow upon the second air link, said selector further for selecting whether to alter the second packet data flow upon the communication link, figure 3, paragraph 0045.

Regarding claim 7, Yang discloses the indication of the communication of the packet data in the first packet data flow and of which said data packet flow selector is coupled to receive comprises a interference value (value representative of an air link performance indicia), paragraph 0039.

Regarding claim 8, Yang discloses that packet data communicated in the first packet data flow by way of the first air link is communicated upon the first air link pursuant to an ARQ scheme in which the first mobile station returns an ACK (acknowledgment) when a data packet is successfully received at the first mobile station and a NACK (negative acknowledgment) when the data packet is unsuccessfully received at the first mobile station and wherein the indication, of the communication of the packet data in the first packet data flow, to which said packet data flow selector is coupled to receive, comprises a value inversely related to numbers of ACKs returned by the first mobile station, paragraph 0058-0059.

Regarding claim 9, Yang discloses that the interface element comprises a queue (buffer), hereinafter buffer, at which data packets are buffered at least for a selected time until an ACK is returned by the first mobile station indicating successful reception thereof at the first mobile station, the data packets buffered at the buffer forming a queue of a queue length corresponding to the data packets buffered at the buffer and wherein the indication, of the communication of the packet data in the first packet data flow, to which said packet data flow selector is coupled to receive further comprises a queue length indicia representative of the queue length at the buffer, paragraphs 0087-0092.

Application/Control Number: 09/966,897 Page 6

Art Unit: 2665

Regarding claims 10, 16, 19, Yang discloses that data packet flow selector selects to terminate communication of the first packet data flow upon the communication path when the queue length indicia is beyond a number of blocks being delayed at the queue (selected threshold), figure 3, paragraphs 0087-0092.

Regarding claims 11, 12, 15, 17 Yang discloses the indication of the communication of the packet data in the first packet data flow and of which said data packet flow selector is coupled to receive comprises a value representative of an interference level (signal-to-noise ratio) of data packets communicated upon the first air link, figure 3.

Regarding claims 14, 20 Yang discloses that data packet flow selector selects to reject (terminate) the first packet data flow upon the communication path when the indication of the communication of the packet data in the first packet data flow and of which said data packet flow selector is coupled to receive when the indication is beyond a selected threshold, paragraphs 0087-0092.

Regarding claims 18, 23, 24 Yang discloses that the selected threshold comprises a varying, selectable threshold, paragraph 0092.

## Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

<sup>(</sup>a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Application/Control Number: 09/966,897 Page 7

Art Unit: 2665

4. Claims 3, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (U.S Publication No. 2002/0041566 A1) in the view of Toth et al (U.S Patent No. 5,708,655 B2).

Regarding claims 3, 4 Yang discloses the limitations of base clams and the service rate decision (selector) selecting to reject (terminate) the date packet from the mobile station to the base station or keep the same service rate if the interference region not changed used CAC, figure 3, paragraph 0044. Therefore, the data packet flows from the BSSGP (interface element) to the GTP (network portion) also being terminated.

Yang does not specifically disclose that the network GPRS includes a base station gateway (network element) connecting to the interface element (BSS). Toth discloses the network GPRS having core network service nodes 18 (base station gateway) connecting to the BSS 26, col.6 lines 38-48. It would have been obvious to one having ordinary skill in the art to have the feature of Toth implemented in Yang's GPRS network so that data packets can be routed properly between mobile stations and the Internet network.

#### Conclusion

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (571) 272-3156. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

Application/Control Number: 09/966,897 Page 8

Art Unit: 2665

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

Thien Tran

STEVEN NGUYEN PRIMARY EXAMINER